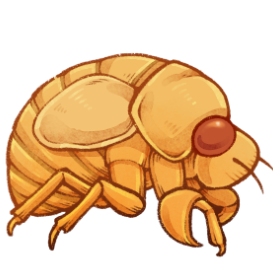


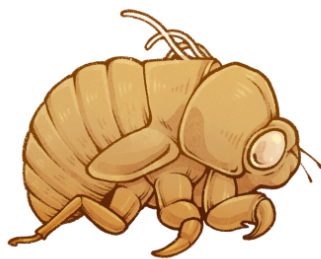
DAWN OF THE CICADA

Millions of periodical cicadas will burst from the ground this spring! It's one of the coolest natural events in America. Brood 10, or Brood X, cicada eggs all hatched together 17 years ago and have been feeding on the roots of trees until this year, 2021. Think of a brood like your school class. Brood X grew up together over the last 17 years and will soon graduate, leaving the soil to become adults.

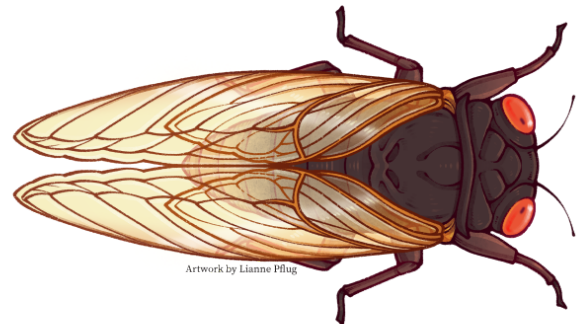
When these young cicadas, called nymphs, are ready to become adults, they crawl to the top of the soil. When the ground is the right temperature, nymphs leave the soil. They crawl up onto trees to shed their shell (exoskeleton). This shedding, or molting, leaves their empty old nymph exoskeleton behind. The new adults are white, soft, and squishy, but harden overnight.



Cicada Nymph



Cicada Shell (exuvia)



Artwork by Lianne Pflug

Adult 17-Year Cicada

Once the cicadas' shells are hard, male cicadas begin to make a really loud noise. They use special structures called tymbals to sing a song to attract females. Each cicada species sings their own special song to attract females of their species.

Once female cicadas mate, they lay their eggs in the twigs of trees. After six weeks the eggs hatch, and tiny nymphs drop to the soil and start feeding on tree roots. The cycle starts all over again, with a new class of cicadas emerging in 17 years!



LEARN

Watch, listen, or read for more information on periodical cicadas!

Podcasts

Short Wave
Brood X: The Rise
Of The 17-Year
Cicadas

Ologies
Cicadology
(Cicadas) with Dr.
Gene Kritsky

Videos

PBS Digital Studio
Why are cicadas so
good at math?

BBC Studios
Amazing Cicada Life
Cycle: Sir David
Attenborough's Life
In the Undergrowth

Websites

Cicada Mania
Periodical Cicada in
Indiana

Books

Periodical Cicadas :
The Brood X Edition
A Periodical Cicada's
Life

CREATE

Get inspired by the periodical cicadas and create something as unique as they are! Follow the links below to make some periodical cicada inspired crafts, or wing it and make your own cicada inspired masterpiece!

- [Make an origami cicada](#)
- [Bake cicada cookies](#)
- [Color this life cycle from Artsashina](#)





EXPLORE!

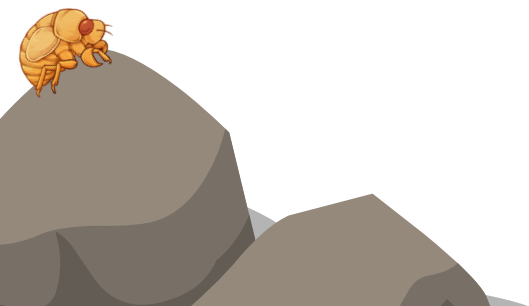
Watch the cicadas to learn about their life cycle and how they impact the animals and plants around them

Choose a tree to watch! Because the nymphs feed on the roots, periodical cicadas will emerge around trees.

Make a prediction: From what you have learned, try and guess what you might see when you watch the cicadas.

Observe: Look for signs of cicadas, adult cicadas, and what they are doing. Start by asking yourself questions like:

- Can you see exit holes from nymphs leaving the soil?
- How many cicada shells can you find?
- Do you see any live cicadas around? If so how many?
- Is anything eating the cicadas? If so, what?
- Do you see any dead cicadas?



DATA SHEET

Date:

Time:

Prediction:

How many cicadas do you think there are?
How do you know?

Observations:

What are the cicadas doing?

Observations:

EXPLAIN

- Were your predictions correct, why or why not?
- Why do you think periodical cicadas come out all at once?
- Did you see cicadas interacting with other animals? What happened?
- This year's cicadas will lay eggs that won't hatch until 17 years from now. What year will that be?